

Atty Ref. No: S0002-US02

Amendments to the Claims:

This listing of the claims will replace all previous versions and listings of the claims in the application:

Listing of the Claims

1. (currently amended) A water supply sub-system for connection to a main water supply system, said sub-system comprising:

a storage tank having an inlet for connection to said main water supply system, and an outlet;

a flow control valve connected to said inlet;

an outlet line connected to the outlet of said storage tank;

a pump connected to said outlet line;

a sub-system supply line connected to said pump, said supply line forming a fluid flow feedback loop to said storage tank; and

~~a branch connection~~ at least one branch connection connected to said sub-system supply line;

a shunt feedback line connected to said pump and to said tank in parallel fluid flow to said supply line; and

a pressure control valve in said shunt feedback line.

2. A sub-system according to Claim 1 wherein a high-demand water-using device is connectable to said branch connection to receive water from said water supply sub-system.

3. A sub-system according to Claim 2 wherein said high-demand water using device is a dialyzer re-use machine.

4. A sub-system according to Claim 2 wherein said high-demand water using device is a dialyzer pre-cleaning machine.

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5. A sub-system according to Claim 1 wherein said sub-system comprises a plurality of branch connections whereby a plurality of water using devices may be simultaneously connected to respective branch connections so that said plurality of water using devices may simultaneously receive water from said water supply system.
6. (currently amended) A sub-system according to Claim 1 further comprising a ~~feedback loop~~ drain connected to said sub-system supply line.
7. (currently amended) A sub-system according to ~~Claim 6~~ Claim 1 wherein said shunt feedback loop is disposed downstream of said at least one branch connection.
8. (currently amended) A sub-system according to ~~Claim 6~~ Claim 34 wherein said shunt feedback loop is disposed upstream of said at least one branch connection.
9. (currently amended) A sub-system according to ~~Claim 6~~ Claim 34 in which said storage tank has a spray head disposed therein, ~~said spray head being connected to said inlet to said tank and being disposed to spray inlet water into said storage tank~~, said spray head also being connected to said feedback loop to receive recirculated water therefrom and spray said recirculated water into said storage tank.
10. (currently amended) A sub-system according to ~~Claim 1~~ Claim 34 in which said storage tank has a spray head disposed therein, said spray head being connected to said inlet to said tank and being disposed to spray inlet water into said storage tank.
11. (currently amended) A sub-system according to Claim 1 further comprising an ultrafiltration device disposed in said supply line downstream of said pump and upstream of said at least one branch connection.
12. A sub-system according to Claim 1 whereby said sub-system is used in a medical application.

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13. A sub-system according to Claim 1 whereby said sub-system is used in a pharmaceutical manufacturing application.

14. A sub-system according to Claim 1 whereby said sub-system is used in an electronics manufacturing application.

15. (currently amended) A water supply system comprising
a water processing unit;
a main inlet line connected to said water processing unit;
a main outlet line leading from said water processing unit;
a plurality of main branch connections emanating from said main outlet line; and
a water supply sub-system connected to said main water supply system, said sub-system comprising:

a storage tank having an inlet and an outlet, said inlet being connectable to one of said plurality of main branch connections and having a flow control valve connected thereto;

an outlet line connected to the outlet of said storage tank;

a pump connected to said outlet line;

a sub-system supply line connected to said pump; and

a sub-system branch connection connected to said sub-system supply line;

a shunt feedback line connected between said supply line and said tank; and

a pressure control valve in said shunt feedback line.

16. A water supply system according to Claim 15 wherein the water processing unit is a water purification device.

17. A water supply system according to Claim 15 wherein the water processing unit is a water storage device.

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18. A water supply system according to Claim 15 wherein a low demand water device is connected to one of said plurality of main branch connections emanating from said main outlet line.

19. A water supply system according to Claim 18 wherein said low demand water device is a dialysis machine.

20. A sub-system according to Claim 15 wherein a high-demand water using device is connectable to said branch connection to receive water from said water supply sub-system.

21. A sub-system according to Claim 20 wherein said high-demand water using device is a dialyzer re-use machine.

22. A sub-system according to Claim 20 wherein said high-demand water using device is a dialyzer pre-cleaning machine.

23. A sub-system according to Claim 15 whereby said sub-system is used in a medical application.

24. A sub-system according to Claim 15 whereby said sub-system is used in a pharmaceutical manufacturing application.

25. A sub-system according to Claim 15 whereby said sub-system is used in an electronics manufacturing application.

26. A method for providing water from a main water supply system to a high demand device without adversely impacting the water flow parameters of the water flowing in said main water supply system, said method comprising,

connecting a supply sub-system to said main supply system, said sub-system comprising:

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a storage tank having an inlet for connection to said main water supply system,
and an outlet;

an outlet line connected to the outlet of said storage tank;

a pump connected to said outlet line;

a shunt feedback line connected between said pump and said tank; and

a pressure control valve in said shunt feedback line;

connecting a high demand device to said supply sub-system;

flowing water ~~through~~ from said main water supply system and into said sub-system
through a flow control valve at a reduced rate such that water pressure in said main supply
system is relatively constant;

flowing water in said sub-system to said high demand device for its use; and

controlling water supply to said high demand device by regulating water pressure in said
shunt feedback line.

27. A method for providing water according to Claim 26 wherein said main water supply system has a low demand device connected thereto and wherein said step of flowing water through said main water supply system includes flowing water to said low demand device.

28. A method for providing water according to Claim 27 wherein said low demand device is a dialysis machine.

29. A method for providing water according to Claim 26 wherein said high demand device is a dialyzer re-use machine.

30. A method for providing water according to Claim 26 wherein said high-demand water using device is a dialyzer pre-cleaning machine.

31. A method for providing water according to Claim 26 which further comprises a step for disinfecting the main supply system using heat whereby the sub-system is isolated from main supply system during the disinfecting step.

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32. (currently amended) A method for providing water according to Claim 26 which further comprises a step for disinfecting the sub-system using a chemical whereby the sub-system is isolated from main supply system during the disinfecting step by

disconnecting said inlet from said main water system and

connecting said inlet to a high-pressure side of said pump.

33. (new) A sub-system according to Claim 1 further comprising a check valve in said inlet.

34. (new) A sub-system according to Claim 1 further comprising a fluid volume control in said tank connected to said inlet.

35. (new) A sub-system according to Claim 34 wherein said fluid volume control comprises an inlet valve and a float arm coupled to said inlet valve.

36. (new) A sub-system according to Claim 1 further comprising an inlet coupling connected to said inlet adapted to selectively connect or disconnect said inlet to said main water supply system and a mating coupling in fluid communication with said tank, said mating coupling being adapted to selectively receive said inlet coupling.

37. (new) A sub-system according to claim 36 wherein said mating coupling is in said shunt feed-back loop.

38. (new) A sub-system according to claim 36, further comprising a disinfectant inlet port in said tank.

39. (new) A sub-system according to claim 1 wherein said pressure valve further comprises a pressure sensor.

40. (new) A sub-system according to claim 1 wherein said tank further comprises a filtered vent.